

the direction of the joint line changes, so that the rotary tool is withdrawn from the joint line;

changing the direction of said rotary tool or said members being welded;

reinserting said rotary tool to said members being welded substantially at the position where said rotary tool was retreated; and

moving said rotary tool along the joint line in the changed direction of the joint line.

2. (Amended) A friction stir welding method according to claim 1, wherein said direction of said rotary tool is changed by retreating said tool and then rotating a device that supports said rotary tool, thereby varying the tilt angle of said rotary tool against the direction of movement thereof.

7. (Amended) A friction stir welding method according to claim 5, further comprising:

upon reinsertion, inserting the rotary tool to a depth deeper than the insertion depth of said rotary tool before being retreated; and

after reinsertion, gradually reducing the insertion depth after starting the movement of said rotary tool.

Please add the following new claims to the application:

--16. A friction stir welding method according to claim 1, wherein the direction of the joint line changes from a first direction to a second direction, the second direction being orthogonal to the first direction.

17. A friction stir welding method according to claim 16, wherein the first and second directions are straight lines.

18. A friction stir welding method according to claim 1, wherein the direction of the joint line changes from a first direction to a second direction, at least one of the first and second directions being a straight line.

19. A friction stir welding method according to claim 1, wherein one of the at least first and second members has a projection along the joint line, extending toward the rotary tool, and another of the at least first and second members, adjacent the joint line and forming the joint line with said one of the at least first and second members, does not have a projection; and wherein a fillet weld is provided on said another of the at least first and second members, at the joint line between said one and said another of said at least first and second members.

20. A friction stir welding method according to claim 19, wherein said fillet weld has a height and width substantially the same as a height and width of said projection.

21. A friction stir welding method according to claim 8, wherein rotation of the rotary tool is continued during said retreating, while movement of the rotary tool along the joint line is stopped during said retreating.

22. A friction stir welding method according to claim 21, wherein the rotary tool is tilted during said retreating.

23. A friction stir welding method according to claim 1, wherein the rotary tool is rotated during said reinserting at the position where the rotary tool was retreated.

24. A friction stir welding method according to claim 1, wherein during said retreating a hole is left at the position where the rotary tool was retreated, and wherein in said reinserting the rotary tool is inserted into said hole.

25. A friction stir welding method according to claim 1, wherein said conducting friction stir welding is performed prior to said retreating, and is performed to said position where the direction of the joint line changes.

26. A friction stir welding method according to claim 1, wherein the joint line extends continuously through the position where the direction of the joint line changes.

27. A friction stir welding method comprising:  
retreating a rotary tool from members being welded when said rotary tool moving along a joint line reaches a position where the direction of the joint line changes;

changing the direction of said rotary tool or said members being welded, wherein said direction is changed by retreating said tool and then rotating said members being welded, thereby varying the tilt angle of said rotary tool against the direction of movement thereof;

reinserting said rotary tool to said members being welded substantially at the position where said tool was retreated; and

moving said rotary tool along a new joint line.--